

Expanded Shotgun Slug Trajectory Table

By Chuck Hawks

In order to hit a target with a slug (bullet) a shotgun must be correctly sighted-in, and to accomplish that the shooter must have some working knowledge of the slug's trajectory. A slug shooting shotgun is usually zeroed to hit dead on at a fixed distance, such as 100 yards. Shotgun slugs are inherently short range ammunition due to their relatively low muzzle velocity (MV) and terrible ballistic coefficient (BC). They shed velocity, energy, and killing power rapidly, so long range shooting at game animals should not be attempted.

The table below is designed to serve as a starting point from which a shooter can work. Used as such it can save a lot of trial and error experimentation. Of course, no trajectory table can possibly cover all loads for all gauges in all shotguns. So after sighting-in, always check your individual gun at various ranges to see how close its trajectory comes to the published data. This trajectory table can also serve as a comparative tool, allowing the reader to compare the trajectories of different slug loads.

All trajectories were calculated for a shotgun used with iron sights whose line of sight is 0.5 inches above the bore axis of the barrel. All trajectory figures are in inches and rounded off to one decimal place. While environmental factors such as altitude and ambient air temperature affect trajectory, their effect on shotgun slugs is relatively minor and can be ignored. The following data was taken from the ballistics tables published by the major ammunition manufacturers (Federal, Remington, and Winchester). The Federal catalog states that their test barrel length is 30".

To save space, the following abbreviations are used in the table below: ga = gauge; Fed = Federal; H-S = Hydro-Shok HP; Rem = Remington; BH = BuckHammer slug; MR = Managed-Recoil; HV= High Velocity; Win = Winchester; PP = Power Point; HP = Hollow Point; sabot = sabot slug; rifled = Foster type rifled slug; Ws = Weight of slug (in ounces); MV = Muzzle Velocity (in feet per second); yds = yards; inches = "; n/a = not available.

Gauge/Length - Brand, Type	Ws at MV	25 yds.	50 yds.	100 yds	125 yds
12 ga/3" - Fed, Barnes sabot	1 at 1530	+1.3	+2.0	+/- 0	-2.9
12 ga/3" - Fed, H-S sabot	1 at 1550	+1.4	+2.2	+/- 0	-3.3
12 ga/3" - Rem, Copper sabot	1 at 1550	n/a	+/- 0	-2.9	n/a
12 ga/3" - Rem, BH	1 3/8 at 1500	n/a	+/- 0	-4.0	n/a
12 ga/3" - Rem, HV rifled	7/8 at 1875	n/a	+/- 0	-3.7	n/a
12 ga/3" - Rem, rifled	1 at 1760	n/a	+/- 0	-3.4	n/a
12 ga/3" - Win, BRI sabot	1 at 1550	+0.8	+2.0	+/- 0	-3.7
12 ga/3" - Win, BRI sabot	1 at 1400	+1.2	+2.5	+/- 0	-4.3
12 ga/3" - Win, HP rifled	1 at 1760	+0.2	+/- 0	-4.6	-9.7
12 ga/2.75" - Fed, Barnes sabot	1 at 1450	+1.4	+2.2	+/- 0	-3.3
12 ga/2.75" - Fed, Barnes sabot	3/4 at 1900	+0.7	+1.2	+/- 0	-1.9
12 ga/2.75" - Fed, H-S sabot	1 at 1450	+1.8	+2.5	+/- 0	-3.7
12 ga/2.75" - Fed, rifled	1 at 1600	+0.3	+/- 0	-5.7	n/a
12 ga/2.75" - Fed, rifled	1 at 1300	+0.6	+/- 0	-7.4	n/a
12 ga/2.75" - Rem, Copper sabot	1 at 1450	n/a	+/- 0	-3.5	n/a
12 ga/2.75" - Rem, BH	1 1/4 at 1550	n/a	+/- 0	-3.6	n/a
12 ga/2.75" - Rem, MR BH	1 1/8 at 1350	n/a	+/- 0	-5.5	n/a
12 ga/2.75" - Rem, HV rifled	7/8 at 1800	n/a	+/- 0	-4.1	n/a
12 ga/2.75" - Rem, rifled	1 at 1680	n/a	+/- 0	-3.8	n/a
12 ga/2.75" - Rem, rifled	1 at 1560	n/a	+/- 0	-4.8	n/a
12 ga/2.75" - Rem, MR rifled	1 at 1200	n/a	+/- 0	-7.4	n/a
12 ga/2.75" - Win, BRI sabot	1 at 1450	+1.1	+2.3	+/- 0	-4.1
12 ga/2.75" - Win, BRI sabot	1 at 1350	+1.3	+2.7	+/- 0	-4.6
12 ga/2.75" - Win, PP rifled	1 at 1700	+0.3	+/- 0	-5.4	-11.2
12 ga/2.75" - Win, HP rifled	1 at 1600	+0.4	+/- 0	-5.9	-12.1
16 ga/2.75" - Rem, rifled	4/5 at 1600	n/a	+/- 0	-4.8	n/a

16 ga/2.75" - Win, HP rifled	4/5 at 1600	+0.4	+/- 0	-5.9	-12.1
Gauge/Length - Brand, Type	Ws at MV	25 yds.	50 yds.	100 yds	125 yds
20 ga/3" - Fed, Barnes sabot	5/8 at 1900	+0.7	+1.2	+/- 0	-1.9
20 ga/3" - Fed, H-S sabot	5/8 at 1450	+1.7	+2.7	+/- 0	-4.0
20 ga/3" - Rem, BH	1 at 1550	n/a	+/- 0	-4.1	n/a
20 ga/3" - Win, HP rifled	3/4 at 1800	+0.2	+/- 0	-4.8	-10.2
20 ga/2.75" - Fed, Barnes sabot	5/8 at 1600	+1.2	+1.9	+/- 0	-2.8
20 ga/2.75" - Fed, rifled	3/4 at 1600	+0.3	+/- 0	-5.3	n/a
20 ga/2.75" - Rem, Copper sabot	5/8 at 1500	n/a	+/- 0	-3.1	n/a
20 ga/2.75" - Rem, MR BH	7/8 at 1350	n/a	+/- 0	-6.2	n/a
20 ga/2.75" - Rem, rifled	5/8 at 1580	n/a	+/- 0	-4.2	n/a
20 ga/2.75" - Win, BRI sabot	5/8 at 1400	+1.2	+2.6	+/- 0	-4.5
20 ga/2.75" - Win, HP rifled	3/4 at 1600	+0.3	+/- 0	-5.9	-12.1
.410/3" - Win, HP rifled	1/4 at 1800	+0.3	+/- 0	-5.8	-11.0
.410/2.5" - Rem, rifled	1/5 at 1830	n/a	+/- 0	-3.5	n/a
.410/2.5" - Win, HP rifled	1/5 at 1830	+0.3	+/- 0	-5.8	-12.0